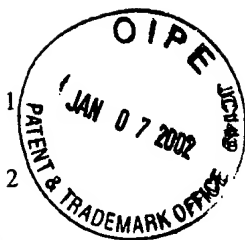




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PATENT TRADEMARK OFFICE

103.1072.01



ABSTRACT OF THE DISCLOSURE

COPY OF PAPERS
ORIGINALLY FILED

The invention provides an improved method and apparatus for creating a snapshot of a file system. A "copy-on-write" mechanism is used. The snapshot uses the same blocks as the active file system until the active file system is modified. Whenever a modification occurs, the modified data is copied to a new block and the old data is saved. In this way, the snapshot only uses space where it differs from the active file system, and the amount of work required to create the snapshot is small. A record of which blocks are being used by the snapshot is included in the snapshot itself, allowing effectively instantaneous snapshot creation and deletion. A snapshot can also be deleted instantaneously simply by discarding its root inode.